Hollow-fiber membrane modules

```
L20 ANSWER 49 OF 121 HCA COPYRIGHT 2002 ACS
```

AN 106:6790 HCA

IN Kikuchi, Toshiaki

PA Asahi Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 61192309 A2 19860826 JP 1985-31542 10850221

PI JP 61192309 A2 19860826 JP 1985-31542 19850221

AB Hollow-fiber membrane is a shell-and-tube module with a tube plate at each end of a fiber bundle and plugged at an end in the plate. Among the tube bundle, the module has several perforated pipes (diam. 0.1-10 mm) as distributors for feeding washing liq. against fibers externally in the shell, parallel to the tube bundle. Scales and colloids deposition on the outer surface of the hollow fibers are washed effectively by air or air-washing liq. mixt. injected from the distributor tubes.

63